

What Is Claimed Is:

1 1. A system for operating system recovery in a computer
2 system, comprising:
3 a data storage device, comprising;
4 a first partition;
5 a second partition including an image copy of an operating
6 system; and
7 a third partition including bootable files; and
8 a basic input/output system having a system recovery
9 function to activate the third partition and boot the
10 computer system to the third partition if the system
11 recovery function is executed,
12 wherein after the computer system is booted to the third
13 partition, the computer system unpacks the image copy
14 of the operating system in the second partition into
15 an integral copy of operating system and copies the
16 integral copy of operating system to the first
17 partition, deactivate the third partition, activates
18 the first partition, and reboots the computer system
19 to the first partition.

1 2. The system for operating system recovery as claimed
2 in claim 1 wherein the third partition has a label, and the basic
3 input/output system further checks the label and presents the
4 system recovery function if the label conforms to a predetermined
5 ID.

1 3. The system for operating system recovery as claimed
2 in claim 1 wherein the basic input/output system further disables

Client's ref.: PNAI-SW-0076-USXX
Our ref.: 0636-8645-USf/yianhou/kevin

3 the system recovery function if the computer system is booted
4 to the third partition.

1 4. The system for operating system recovery as claimed
2 in claim 1 wherein the second partition further includes a batch
3 file to generate an installation file of an application or a patch
4 file of the operating system, and wherein the batch file is
5 executed to generate the installation file of the application
6 or the patch file of the operating system to the first partition
7 after the computer system is booted to the third partition.

1 5. The system for operating system recovery as claimed
2 in claim 4 wherein the installation file or the patch file are
3 executed to install the application or patch the operating system
4 in the first partition after the computer system is rebooted to
5 the first partition.

1 6. The system for operating system recovery as claimed
2 in claim 1 wherein the operating system image file and the batch
3 file are hidden in the second partition.

4 7. A system for operating system recovery in a computer
5 system, comprising:
6 a data storage device, comprising;
7 a first partition;
8 a second partition including a plurality image copies of
9 an operating system and a plurality of batch files;
10 and
11 a third partition including bootable files; and
12 a basic input/output system having a system recovery
13 function to activate the third partition and boot the

14 computer system to the third partition if the recovery
15 function is executed,
16 wherein after the computer system is booted and one of the
17 image copies of the operating system in the second
18 partition is selected, the computer system unpacks
19 the selected image copy of the operating system into
20 an integral copy of the operating system and copies
21 the integral copy of the operating system to the first
22 partition, selects one of the batch files according
23 to the selected image copy of the operating system,
24 executes the selected batch file to generate an
25 installation file of an application or a patch file
26 of the operating system to the first partition,
27 deactivates the third partition, activates the first
28 partition, and reboots the computer system to the
29 first partition.

1 8. The system for operating system recovery as claimed
2 in claim 7 wherein the third partition has a label, and the basic
3 input/output system further checks the label, and presenting the
4 system recovery function if the label conforms to a predetermined
5 ID.

1 9. The system for operating system recovery as claimed
2 in claim 7 wherein the basic input/output system further disables
3 the system recovery function if the computer system is booted
4 to the third partition.

1 10. The system for operating system recovery as claimed
2 in claim 7 wherein the installation file or the patch file are
3 executed to install the application or patch the operating system

Client's ref.: PNAI-SW-0076-USXX
Our ref.: 0636-8645-USf/yianhou/kevin

4 in the first partition after the computer system is rebooted to
5 the first partition.

1 11. The system for operating system recovery as claimed
2 in claim 7 wherein the basic input/output system further deletes
3 all image copies of the operating system other than the selected
4 image copy of the operating system and all batch files other than
5 the selected batch file from the second partition.

1 12. The system for operating system recovery as claimed
2 in claim 7 wherein the image copies of the operating system and
3 the batch files are hidden in the second partition.

1 13. A method of operating system recovery for a computer
2 system, comprising the steps of:
3 providing a data storage device comprising a first
4 partition, a second partition including an image
5 copy of an operating system and a third partition
6 including bootable files;
7 providing a basic input/output system having a system
8 recovery function;
9 if the system recovery function is executed, activating the
10 third partition and booting the computer system
11 thereto; and
12 unpacking the operating system image file from the second
13 partition into an integral copy of the operating
14 system and copying the integral copy of the
15 operating system to the first partition;
16 deactivating the third partition and activating the
17 first partition; and
18 rebooting the computer system to the first partition.

1 14. The method of operating system recovery as claimed in
2 claim 13 further comprising checking a label of the third
3 partition, and presenting the system recovery function if the
4 label conforms to a predetermined ID.

1 15. The method of operating system recovery as claimed in
2 claim 13 further comprising disabling the system recovery
3 function if the computer system is booted to the third partition.

1 16. The method of operating system recovery as claimed in
2 claim 13 wherein the second partition further includes a batch
3 file to generate an installation file of an application or a patch
4 file of the operating system, and the method further comprising
5 executing the batch file to generate the installation file of
6 the application or the patch file of the operating system to the
7 first partition after the computer system is booted to the third
8 partition.

1 17. The method of operating system recovery as claimed in
2 claim 16 further comprising executing the installation file or
3 the patch file to install the application or patch the operating
4 system in the first partition after the computer system is
5 rebooted to the first partition.

1 18. A method of operating system recovery for a computer
2 system, comprising the steps of:
3 providing a data storage device comprising a first
4 partition, a second partition including a plurality
5 of image copies of an operating system and a plurality
6 of batch files and a third partition including
7 bootable files;

Client's ref.: PNAI-SW-0076-USXX
Our ref.: 0636-8645-USf/yianhou/kevin

8 providing a basic input/output system having a system
9 recovery function;
10 if the system recovery function is executed, activating the
11 third partition and booting the computer system
12 thereto; and
13 after the computer system is booted and one of the image
14 copies of the operating system in the second
15 partition is selected, unpacking the selected image
16 copy of the operating system into an integral copy
17 of an operating system and copying the integral copy
18 of the operating system to the first partition;
19 selecting one of the batch files according to the
20 selected image copy of the operating system;
21 executing the selected batch file to generate an
22 installation file of an application or a patch
23 file of the operating system to the first
24 partition;
25 deactivating the third partition and activating the
26 first partition; and
27 rebooting the computer system to the first partition.

1 19. The method of operating system recovery as claimed in
2 claim 18 further comprising checking a label of the third
3 partition and presenting the system recovery function if the
4 label conforms to a predetermined ID.

1 20. The method of operating system recovery as claimed in
2 claim 18 further comprising disabling the system recovery
3 function if the computer system is booted to the third partition.

1 21. The method of operating system recovery as claimed in
2 claim 18 further comprising executing the installation file or
3 the patch file to install the application or patch the operating
4 system in the first partition after the computer system is
5 rebooted to the first partition.

1 22. The method of operating system recovery as claimed in
2 claim 18 further comprising deleting all image copies of the
3 operating system other than the selected image copy of the
4 operating system and all batch files other than the selected
5 batch file from the second partition.

1 23. The method of operating system recovery as claimed in
2 claim 18 wherein the image copies of the operating system and
3 the batch files are hidden in the second partition.

1 24. A method of modeling a computer system, comprising the
2 steps of:

3 receiving an order from a customer, designating at least
4 an operating system and an application or patch file
5 for the operating system;

6 partitioning a data storage device of the computer system
7 into a first partition, a second partition and a third
8 partition;

9 storing an image copy of the designated operating system
10 and a batch file in the second partition, in which
11 the batch file generates an installation file of the
12 application and the patch file for the operating
13 system in the first partition;

14 storing bootable files in the third partition and hide the
15 third partition;
16 providing a system recovery function to a basic
17 input/output system; and
18 providing the computer system, including the basic
19 input/output system having the system recovery
20 function, the image copy of the designated operating
21 system, and the batch file, to the customer.

1 25. The method as claimed in claim 24 wherein when the
2 system recovery function is executed, further comprising the
3 steps of:

4 activating the third partition and booting the computer
5 system thereto;
6 after the computer system is booted, unpacking the image
7 copy of the operating system in the second partition
8 into an integral copy of the operating system and
9 copying the integral copy of the operating system to
10 the first partition;
11 executing the batch file to generate the installation file
12 of the application or the patch file of the operating
13 system to the first partition;
14 deactivating the third partition and activating the first
15 partition; and
16 rebooting the computer system to the first partition.

1 26. The method as claimed in claim 25 further comprising
2 executing the installation file or the patch file to install the
3 application or patch the operating system in the first partition
4 after the computer system is rebooted to the first partition.